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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/059,765 04/14/98 HIRATA

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EXAMINER

TM02/0326

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SEAL, J  
ART UNIT

PAPER NUMBER

2131  
DATE MAILED:

03/26/01

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.

09/059,765

Applicant(s)

Shinichi Hirata

Examiner

James Seal

Group Art Unit

2131



☒ Responsive to communication(s) filed on 2 Jan 2001

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claim

☒ Claim(s) 1-12 is/are pending in the application

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 1-12 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some\* ☒ None of the CERTIFIED copies of the priority documents have been

☒ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s) \_\_\_\_\_

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

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### **DETAILED ACTION**

1. This office action is in response to your correspondence of 2 January 2001.
2. Applicants should note the change in the number assigned to the examining art unit from 2766 to 2131.
3. Corrections to the Abstract lines 10-11, and 20-21 have been entered.
4. Amendments to the specification: page 2-8, 11-14, 16 -18, 20-24, 30-31, 36, 33-42, and 44-45 have been entered.
5. Corrections to Figures 10 and 13 B have been approved and entered.
6. Amended claims 1-2, and 4-9 have been entered.
7. New claims 10-12 have been entered.
8. Claims 1-12 are pending.
9. Prior art rejection has based on Berardinis and Schneier been withdrawn due to new claims and amended claims.

### ***Drawings***

10. This application has been filed with informal drawings which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.
11. Prior art objection to Figure 1, is maintained. Figure one show a two provider connected to the Internet. How is this novel?

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***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 1-12 are rejected under 35 U. S. C. 103 as being anticipated by Motoyama (5887216) and further in view of Rohatgi et. al. (5625693).

14. In claim 1 applicant recites a receiving apparatus which receives electronic mail through a network which consists of an encrypted certificate and control commands such that the control commands control electronic devices remotely. The electronic mail is decrypted, the certificate is checked to see if sender is authorized to use devices and if so the electronic commands are extracted and the sender is allowed to execute commands.

15. Motoyama discloses a system for remotely controlling of office devices (e.g., copiers, printers, scanners, or other electronic devices, (Column 2, 42-43) from a service center which uses Internet electronic mail or alternatives (Column 3, line 16) to remotely assess problems, log service history, reprogramming, download new software, change operating parameters of devices, or take devices off line when device falls outside given parameters and to bring new devices on line and combining operations (Column 3, lines 14-23, Column 9, lines 57-61, Column 10, lines 6-7, Column 16, lines 55-65). Such electronic mail may be encrypted as the

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Internet is insecure (Column 4, lines 51-54) and additional security measures such as fire walls which allows only authorized computers to have access. Thus Motoyama teaches remote control (using control commands) of electronic devices, via a network (the Internet) using electronic mail which is encrypted and which recognizes the need for to authorize computers (see Figure 1, elements 14 and 50). Motoyama is silent on the use of encrypted certificates.

16. Rohatgi et. al. disclose a similar system for executable interactive programs modules (e.g., a transmitted program guide) over an interactive TV network, which attach signed certificates ( Figure 7, elements 52 and 53) to these modules and at the receiver end the certificate is decrypted (Figure 10, element 122) and checked for authenticity of the sender (Figure 10, element 124). If the certificate is authentic the program instructions (control commands) may be executed (Column 1, lines 48-60, Figure 10, elements, 120, and 129)).

17. One of ordinary skill in the art would have been motivated to modify the disclosure of Motoyama with the teachings of Rohatgi et. al. to implement an encryption certificate, so that the office devices can authenticate that the control commands imbedded in the electronic mail message are indeed from the service center. After such authentication has been established the control commands can then be executed. The discloser of Motoyama/Rohatgi et. al. contains all of the limitations of claim 1 and therefore claim 1 is rejected.

18. In claim 2, applicant recites an receiving apparatus with the limitations of claim 1 and with the further limitation that the control commands stored in memory of the receiving apparatus.

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19. Rohatgi et. al. teach that the module assembled and is stored in memory ( Figure 10, element 110), the certificate is then decrypted (Figure 10, element 122), authenticated (Figure 10, element 124) and if authenticated the module is retrieved from memory ( Figure 10, element 129) and executed. Motoyama/Rohatgi et. al. thus meet all limitations of claim 2. Claim 2 is rejected.

20. In claim 3, applicant recites a receiving apparatus with the limitations of claim 1 with the further limitations the certification information is predetermined text information in an encrypted state.

21. Rohatgi et. al. disclose that the certificate is encrypted (Figure 10, element 122), consisting of the ID, private key, expiration date, etc. (Column 9, claim 11-12).

Motoyama/Rohatgi et. al. meet all the limitations of claim 3. Claim 3 is rejected.

22. In claim 4, applicant recites a receiving apparatus with the limitations of claim 1, with the further limitation that the electronic mail message contains predetermined information encrypted by a secret key own by authorized user and a decrytor for decrypting the electronic mail after it is received using a public key.

23. Rohatgi et. al. teach the use of public key with certificates (Column 7, lines 25-27) and in particular including the private (secret) key with the certification (Column 9, line 11).

Motoyama/Rohatgi et. al. meet all of the limitations of claim 4. Claim 4 is rejected.

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24. In claim 5, applicant recites a receiving method for implementing the apparatus of claim 1. It therefore contains the same limitations with respect to art as claim 1 and is therefore claim 5 is rejected.

25. In claim 6, applicant recites a transmitting apparatus which compliments the receiving apparatus of claim 1. It therefore contains the corresponding limitations and as the art teaches communication devices Motoyama/Rohatgi et. al. disclose the transmitter side of the communication device. Claim 6 is rejected.

26. In claim 7, applicant recites a transmitting method for implementing the apparatus of claim 6. It therefore contains the same limitations with respect to art as claim 6. Claim 7 is rejected.

27. In claim 8, applicant recites a transmitting/receiving apparatus consisting both sides of the communication system recited in claims 1 and 6. Motoyama/Rohatgi et. al. describe a communication device (transmitter/receiver) with the same limitations. Claim 8 is rejected.

28. In claim 9, applicant recites a methods implementation of claim 8. It therefore contains the same limitations with respect to art as claim 8. Claim 9 is rejection.

28. In claim 10 applicant recites an apparatus with the limitations of claim 1, with the further limitation that the control commands comprise instructions for controlling a recording device.

29. Motoyama discloses a scanner and facsimile machine (Column 4, line 28) which are capable of recording and storing images and text. Claim 10 is rejected.

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30. In claim 11, applicant claims a terminal, comprising a modem, memory, central processing unit (CPU) for receiving electronic mail, decrypting, extracting, authenticating, and executing control commands.

31. Motoyama discloses alternatives to workstations, such as telephone or ISDN connections and hence modem connections (Column 5, lines 31-36). Rohatgi et. al. disclose terminal (Figure 1, element 10), modem (Figure 1), memory (element 11), microprocessor to execute cryptographic processes and data handling (Figure 1, element 29, 30, and 14; Column 9, lines 38-41). One of ordinary skill in the art would recognize that the telephone connection of Motoyama would be appropriately modified by the system disclosed in Rohatgi et. al.. Claim 11 is rejected.

32. In claim 12, applicant claims a terminal with a display device using a graphical user interface display which send instructions to an input block which adds a encrypted certificate, control commands to operate a electrical device into electronic mail message and transmit message by means of a modem to the network to electrical device.

33. Motoyama/Rohatgi et. al. disclose these limitations and in addition Motoyama discloses his system may be implemented on an Apple Macintosh, which is a known graphic user interface machine (Column 4, line 26-27). Claim 12 is rejected.

***Response to Remarks***

34. Applicant's arguments are moot in view of new prior art.



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***References Cited But Not Applied***

35. In addition to the art disclosed above, the examiner would also like to mention art which pertain but was not applied. The art in connection with remote control of devices via communication links and especially control via encrypted commands has a long history in the art. The following list is given to show a partial history of this art and its application to various devices.

36. The use of remote control using digital logic dates back to N. Tesla (613809) in which he controlled the movements of a boat by radio waves and logic gates.

37. Use of remote control via encrypted communication links is at least as old as the patent issued to Hedy Kiesler Markey (Hedy Lamarr) and George Antheil Secret Communication System in August 1941 (2292387). This patent is important for a number of reasons. It was the first application of remote control of an electronic device (a steerable torpedo) over an encrypted communication link (so that the control commands are secure) and the first application of spread spectrum communications (to prevent jamming). The Markey et al. patent contains the elements of a user interface, network (radio network), encryption, and controlled device (torpedo). Even though different technology is used the same ideas are involved.

38. Freadman (5,722,041) discloses the remote control of a home entertainment center using an remote terminal over a communication link.

39. Matoyama (5819110), also deal with remote control of business machines using Internet mail messages that are encrypted.

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40. Berardinis (1996) teaches the use of the Internet to control house hold appliances with user override. The houses have smart appliances which not only follow a set schedule but may use the Internet to order food and supplies.

41. Ugajin, US 5652892 July 1997, describes a method of controlling remote power sources (an electrical device) with a check of user ID (authentication) and password control over a network (e.g. Internet) with security.

42. Patent EP917052 A1 Remotely Controlling Device Over Internet uses a lab top to control devices A ... N remotely from over the Internet (see figure 1).

43. These patents and articles are listed to show an unbroken link in remote control technology leading to the development of remotely controlled devices using the latest network, the Internet.

44. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

*Conclusion*

45. Any inquiry concerning this communication should be direct to James Seal at telephone number (703) 308 4562. The examiner can normally be reached on Monday through Friday from 7:30 a.m. to 5:30 p.m.

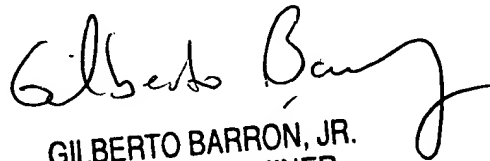
46. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gail Hayes, can be reached at (703) 305-9711.

47. Any inquiry of a general nature or relating to the status of this application or preceding should be directed to the Group receptionist, whose telephone number is (703) 305-3800. Fax number is (703) 305 0040.

James Seal

JWS

15 March 2001

  
GILBERTO BARRON, JR.  
PRIMARY EXAMINER  
ART UNIT-222 2132